

# CE HISTORY

## OPERATION COOL SCHOOL

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The tenure of Major General Augustus M. Minton as Director of Civil Engineering (1957-1963) spanned one of the most interesting, fast-changing periods in Air Force civil engineering history. Air Force engineers went from Air Installation Officers, with reputations as “handymen”, to Base Civil Engineers in 1959. Projects such as ICBM facility and Arctic early warning radar site construction stretched the ingenuity and skills of Air Force engineers.



*Maj Gen Augustus M. Minton*

Pervading this period was Gen. Minton’s strong emphasis on professionalism. He stressed professional registration, the creation of a professional journal, and a close relationship between Air Force engineers and academia. He was also keenly interested in establishing the credentials of the Civil Engineering Center at AFIT. One way Gen. Minton hoped to promote professionalism within Air Force civil engineering was OPERATION COOL SCHOOL.



*Construction of a distant early warning site.*

In 1959, when work on the Ballistic Missile Early Warning System (BMEWS), Dye stations, and the Distant Early Warning (DEW) line was in its most interesting stages, Gen. Minton and Col. Clarence A. Eckert, Director, Civil Engineering Center, determined that few in the professional engineering world understood or appreciated the magnitude and complexity of the engineering work being done in the Arctic. To help get the word out and to foster a closer

relationship with engineering educators, Gen. Minton decided to invite a number of engineers with him on an inspection trip to several of the sites.

From a series of routine inspection trips grew one of the most unusual learning experiences in the field of engineering education—OPERATION COOL SCHOOL. The classroom extended from Greenland across the Arctic to Alaska; the faculty consisted of senior military engineers and Arctic experts; and the students were distinguished university presidents and engineering educators.

The COOL SCHOOL itinerary usually began at Thule AB, Greenland with side trips to visit Dye sites on the Greenland Glacier. The Dye site inspections usually involved either trips on snow-covered aerial tramways or vehicle rides on tortuous hillside roads. The “students” were most interested in the unique methods and materials used in the construction, maintenance and operation of the sites under extremely adverse conditions.

Each stop along the way offered new experiences for the travelers. Landing on an 8,000 foot runway in a ski-equipped C-130 loaded with structural steel

made several of the educators nervous until the pilot informed them that he had a 2,000 mile overrun in case he needed it.

Among the distinguished educators who participated in OPERATION COOL SCHOOL were Dr G.S. Brown, Dean of Engineering, MIT; Dr N.G. Fawcett, President, Ohio State University; Dr F.E. Terman, Provost, Stanford University; and Dr R. Stiemke, Director of Engineering, Georgia Institute of Technology. The members of COOL SCHOOLS II and III were privileged to have the renowned Arctic

explorer, Col. Bernt Balchen (USAF, ret), as a participant.

In all, five COOL SCHOOL tours were held between 1959 and 1962. Nearly 40 different educators and engineers were guests of Gen. Minton. The payoff came in the form of favorable media attention and a better understanding of the engineering challenges faced by the Air Force. However, the biggest benefit was the new relationships developed during the tours between the academic elite and Air Force civil engineers striving to be recognized as professionals.